XX. Die Erforschung des Syntaxwandels III: Phänomene
Research into Syntactic Change III: Phenomena

64. Ergativity

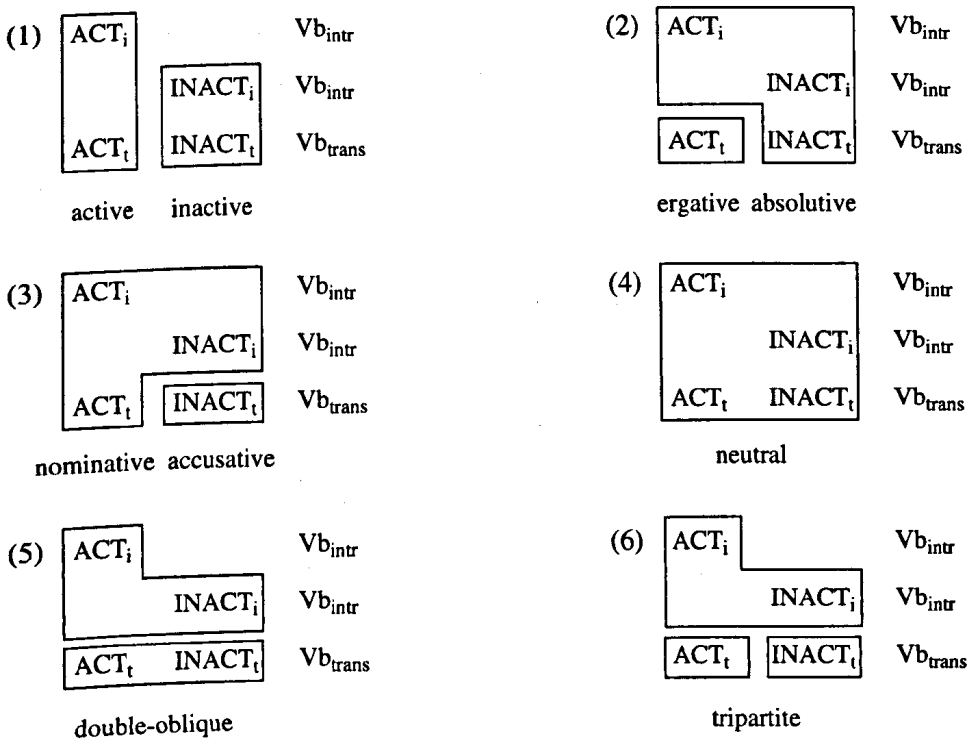
1. Changeable Alignment

1.1. In terms of the valency of verbs (or, more generally, predicates) and the semantic roles associated with them we may distinguish four major kinds of core arguments: active and inactive arguments of intransitives (as in *The soldiers marched* and *The ancient oak fell*), and similarly, although with the two kinds of arguments co-occurring in one clause, active and inactive arguments of transitives (as in *The ducks ate the old bread*) – or ACT_i, $INACT_i$, ACT_t, and $INACT_t$ for short. While perhaps not equally appropriate for all semantic classes of predicates, the characterizations of arguments as denoting active participants and participants acted upon, or performers and undergoers, should enable us to refer summarily to the most common relational oppositions.

When these kinds of arguments are involved in grammatical rules and regularities, they may group in several different ways – if indeed they group at all, for one possibility is that each one behaves differently from every other. ACT_i may be aligned with ACT_t and $INACT_i$ with $INACT_t$, with relational semantic similarities thus taking priority over valency distinctions, yielding a pattern known as 'active (-inactive)', shown schematically in (1). Or ACT_i and $INACT_i$ may fail to be distinguished from one another, in spite of their semantic difference, with both of them then aligning either with $INACT_t$ or with ACT_t, either choice partly motivated and partly arbitrary on semantic grounds, yielding respectively an 'ergative(-absolutive)' or a '(nominative-)accusative' pattern, as seen in (2) and (3). ACT_t and $INACT_t$ may likewise fail to be distinguished from one another, despite their semantic difference and their co-occurrence in a single clause, and then behave like or unlike the uniform intransitive argument, yielding patterns, shown in (4) and (5), that have been called 'neutral' and 'double-oblique' respectively. In the 'tripartite' pattern shown in (6), ACT_i joins $INACT_i$, but ACT_t and $INACT_t$ behave differently from one another as well as from this uniform intransitive argument. (See Kibrik 1979 for an even fuller catalogue of patterns of alignment.)

It will be convenient to use 'active', 'inactive', 'ergative', 'absolutive', 'nominative', and 'accusative' also as general terms for those relations which behave uniformly in the patterns known by these names – viz. for ACT_i/ACT_t and $INACT_i/INACT_t$ in (1), ACT_t and $ACT_i/INACT_i/INACT_t$ in (2), $ACT_i/INACT_i/ACT_t$ and $INACT_t$ in (3), respectively.

Such alignments hold for individual rules and regularities or, more specifically still, for particular domains of their application (as defined, for example, by tense or aspect or nominal reference distinctions). Despite the once common typological practice of labelling entire languages 'ergative', 'accusative' etc., language-particular rules and regularities need not be consistent in this respect. While one or the other alignment pattern may predominate within a language, and to some extent thus justify global type assignments, it is a safe bet that, strictly speaking, all languages are 'split' insofar as their rules and regularities alternatively follow two or more patterns of alignment rather than only a single one. Obviously, then, if we want to study how alignments change in time, it will be those manifesting themselves in particular rules and regularities, or even particular domains of rule applications, that need to be



taken into account primarily. It can only be determined secondarily whether any such particular changes occur in unison, thus supporting the idea of languages converting from one to the other alignment type in their entirety.

1.2. There are rules and regularities which appear to operate on essentially the same alignment patterns in all languages where they are attested. The formation of imperatives has often been mentioned, not quite accurately, as an example of invariably nominative-accusative alignment, making reference to intransitive arguments and ACT_t to the exclusion of $INACT_t$. Normally imperatives consist of predicates denoting kinds of behaviours that may be initiated, or not initiated, at will and are addressed to beings considered capable of choosing to comply, or not to comply, with the directive issued; their addressees, implicit (*Shut up!*) or explicit (*Don't you worry! Somebody open the door please!*), will therefore normally be arguments, of transitives as well as of intransitives, of the ACT but not of the INACT kind, resulting in an active, rather than accusative, alignment. There are instances, especially in passive, i. e. non-basic constructions, where the addressees of imperatives might seem to be INACT's; but this need not argue against an active and for an accusative (or perhaps neutral) patterning of genuine imperative formation as long as such clauses do not really have the force of directives (cf., in English, *Be warned!*), hence may be disregarded, or the seemingly inactive participant really is the one considered primarily responsible for initiating an action, hence is more of an ACT than of an INACT argument after all (cf. *Get dressed everybody!*). An example of a derivational or lexical regularity whose patterning likewise seems cross-linguistically invariable has to do with causatives; what its pattern is, however, depends on how one is looking at it. If we consider the range of arguments of non-causatives which may appear as (not necessarily overtly expressed) causees of corresponding causatives, it typically includes ACT_i, $INACT_i$, and ACT_t, but not $INACT_t$ (cf. *The soldiers marched – The sergeant marched the soldiers; The ancient oak fell – They felled the ancient oak; The ducks eat old bread – They feed the ducks with/on old bread* or *They feed old bread to the ducks*) – which is a nominative-accusative grouping. On the other hand, if we consider which arguments of non-causatives correspond to which arguments of causatives, we need to relate non-causative ACT_i, $INACT_i$, and ACT_t to causative $INACT_t$ (and perhaps also to causative indirect or oblique objects, if the non-causative is already transi-

tive), to the exclusion of causative ACT_t, the argument reserved for the causer – and these relation-ships define a different pattern, almost looking ergative, were it not for the relatability of non-causative ACT_t to causative ACT_t in pairs such as *eat – feed.*

For present purposes we need not adduce further examples of rules and regularities arguably showing cross-linguistically invariable alignment (among these, ergative and also active ones are no less common than accusative ones); nor need we go into the whys and wherefores of such universal preferences (presumably explicable in terms of natural semantic or pragmatic classes of argument relations). The point here is that we must reckon with rules and regularities whose alignments, on the evidence of their cross-linguistic invariance, are resistant to change. The rules which indeed are changeable in this respect typically come from the areas of relational encoding, especially by means of case (or adpositional) marking and agreement, and of clause combination, pertaining in particular to the ellipsis of shared arguments.

1.3. There are three general questions which any systematic account of changes of alignment will need to raise: Which patterns may develop from and into which others? How are the transitions effectuated? What are the reasons for such developments? The focus is here primarily on the ergative pattern, and there is an extra difficulty facing its historians. In many languages and language families where there is reason to believe that relevant changes have occurred, their documentation (in written records) is sparse or nonexistent, and recourse must thus be had to hypothetical, and rarely uncontroversial, reconstructions. If ergative histories were to be based exclusively on hard and fast facts covering none-too-short spans of time, they would virtually be confined to only two families of typological repute, viz. Indo-Iranian and Kartvelian (where there are also controversies, thought less about the facts than about their interpretation). The following account of scenarios for the emergence and demise of ergative alignments will draw on evidence from these families, but in the interest of comprehensiveness much use will also be made of informed, if not always unanimous speculation about others whose past is less well documented.

With the ergative pattern consisting in an identification of arguments across clause types, viz. ACT_i/$INACT_i$ and $INACT_t$, it may appear as well as disappear owing to developments manifesting themselves in intransitive or in transitive clauses (or in both): the argument(s) diachronically realigned may be ACT_i/$INACT_i$ on the one hand or ACT_t and $INACT_t$ on the other. In the following survey, developments both away from and towards ergative alignment will thus be distinguished according to the actual locus of change. We will further distinguish three general mechanisms of change: direct realignments in basic constructions, realignments ensuing from exchanges of construction, and realignments due to revaluations of non-basic constructions as basic and vice versa.

(For lack of space references to specialist literature are omitted from this survey; many of them are supplied in Plank 1985, an article covering partly similar ground, or also in Plank 1979. Other general discussions of ergativity in diachrony include Kuryłowicz 1946; Anderson 1977; Comrie 1978, § 3; Dixon 1979, § 4; Trask 1979; Plank (ed.) 1979, part 6; Dik 1980; Klimov 1983; Estival/Myhill 1988; Harris 1990.)

2. Away from Ergative Alignment

2.1. Intransitive Realignment

2.1.1. A transition from ergative to accusative alignment in basic constructions comes about when a rule or regularity ceases to align the intransitive core argument (subsuming non-distinct ACT_i and $INACT_i$) with $INACT_t$ and aligns it with ACT_t instead, with nothing happening in transitive clauses themselves. Patternwise this kind of development thus amounts simultaneously to an extension of the ergative, originally comprising only ACT_t, and a restriction of the absolutive, originally comprising $INACT_t$ and ACT_i/$INACT_i$. In terms of the resulting pattern the extended ergative, now comprising ACT_t and ACT_i/$INACT_i$, is a nominative, and the restricted absolutive, now comprising only $INACT_t$, an accusative. If such realignments of ACT_i/$INACT_i$ take place gradually rather than across-the-board, they may be expected to produce active patterns: if only some intransitive core arguments are to be realigned with ACT_t, while others continue to align with $INACT_t$, these should be ACT_i's rather than $INACT_i$'s, finding encouragement in relational semantic similarities. Such full and partial extensions of ergatives/restrictions of

absolutives in basic constructions are widespread, especially for rules of case marking, but also for verb agreement (and cross-reference). Here are some characteristic examples, presented in bare outline.

In Kartvelian languages and dialects an originally ergative case marker was extended either to all intransitive core arguments (as in Mingrelian) or, more frequently, only to ACT_i (at least according to the Ancestral Ergative Hypothesis; the rival Ancestral Active Hypothesis posits a reverse development, with an active case marker, i. e. one originally covering ACT_i as well as ACT_t, being restricted to ACT_t, except in Mingrelian, where it was allegedly extended to $INACT_i$ instead). In Udi, of the Lezgian subgroup of Northeast Caucasian, a similar intransitive-centred development was accompanied by a change in transitive clauses, where dative replaced absolutive as a marker, patternwise now accusative, of $INACT_t$. In various Pamir languages, as a late episode in the story of the rise and fall of ergativity in Iranian, the oblique case of ACT_t was extended to the core arguments of a small group of intransitive verbs, including 'weep', 'laugh', and 'cough' – i. e. to some ACT_i's but to no $INACT_i$'s. Indo-European would also have to be included here on the not uncontroversial assumption that a case marker *-*s*, historically encoding ACT_i/$INACT_i$ as well as ACT_t (though not with nouns of all classes), and thus qualifying as a nominative in an essentially accusative-type pattern, had earlier been limited to ACT_t or ACT_t plus ACT_i in an ergative or active pattern. A similar extension of an ergative, or active, case, purportedly reconstructible for Proto-Afroasiatic, seems to have occurred in Akkadian and perhaps further Afroasiatic languages. In the course of the collapse of the earlier inflectional case system and its partial renewal by means of postpositions, modern Indo-Aryan languages frequently generalized the ergative (formally instrumental) case forms of personal pronouns, especially of 1st and 2nd person, to intransitive core arguments, previously marked by the absolutive case; for these pronouns, case assignment then operated, if only temporarily, on a nominative-accusative pattern, with ACT_t and ACT_i/$INACT_i$ being in what used to be the ergative and $INACT_t$ in what used to be the absolutive case forms. In Wappo, apparently of Yukian affiliation, an (extrapolated) ergative case marker encroached on intransitive terrain, replacing the absolutive in main clauses, but not in subordinate and equational ones, and thus producing a split between traditional ergative alignment (in subordinate and equational main clauses) and innovative accusative alignment (in non-equational main clauses). In Sherpa, a Tibeto-Burman language, there is a tendency for ergative case markers, originally confined to perfective verbs in a typical aspectual split, to be extended to ACT arguments especially of verbs of experience which have been intransitivized, or at any rate detransitivized, by the incorporation of their $INACT_t$ arguments, with these extended ergatives then appearing also in the imperfective aspect. In the Polynesian language Samoan an ergative case marker of ACT_t was likewise generalized to less transitive, if not strictly intransitive, clauses, replacing the absolutive on ACT arguments of 'middle' verbs, whose other arguments are oblique objects.

In Burushaski, a language isolate of northern Pakistan, verbal suffixes which originally agreed only with ACT_t in person, number, and class, were extended from transitive to intransitive verbs, with verb agreement, now triggered by ACT_t and ACT_i/$INACT_i$, thus switching from ergative to nominative alignment. (Verbal prefixes, apparently more archaic, are often present as well, agreeing with ACT_i/$INACT_i$ and $INACT_t$.) For Tibeto-Burman, a verb agreement system has been reconstructed whose alignment was split up into a predominant absolutive and a more circumscribed nominative pattern, with ACT_i/$INACT_i$ triggering essentially the same person-number markers on intransitive verbs as $INACT_t$ did on transitive verbs, except for 3rd person $INACT_t$, where ACT_t was the agreement trigger; and precisely such ACT_t-agreeing affixes subsequently spread to intransitive verbs in some languages, replacing the former affixes for the same person-number triggered by ACT_i/$INACT_i$. (A further development in some languages was to drop the pronominal affixes of transitive verbs agreeing with $INACT_t$, which further weakened the remaining absolutive ingredients of verb agreement; in many Tibeto-Burman languages pronominal verb agreement has been lost entirely.) In Lummi, a Coast Salish language with ergative and absolutive sets of pronominal markers agreeing with, or rather cross-referencing, ACT_t on the one hand and $INACT_t$ and ACT_i/$INACT_i$ on the other, the ergative-set markers appear to have been extended also to ACT_i/$INACT_i$ in

subordinate clauses, where they optionally replace absolutive-set markers, thus dividing the domains of ergative and innovated accusative alignment between main and subordinate clauses. In the Siouan language Dakota there are phonological grounds for suspecting that the cross-reference markers for ACT_i (identical with those for ACT_t) have become associated with intransitive verbs later than those for $INACT_i$ (identical with those for $INACT_t$), which suggests that the active agreement pattern derives from an ergative one.

If $ACT_i/INACT_i$ arguments in an ergative pattern, instead of realigning with ACT_t, would discontinue their alignment with transitive arguments altogether, the resulting pattern would be of the tripartite type. This, however, is not what they commonly do. Tripartite patterns are comparatively rare anyhow, being mostly found in languages where one subset of noun phrases follows an ergative, another an accusative pattern in case marking or other relational encoding, and yet another small subset, often including pronouns, combines the two patterns, behaving ergative-like when in ACT_t, accusative-like when in $INACT_t$, and absolutive/nominative-like when in $ACT_i/INACT_i$ function. Wangkumara, a member of the Pama-Nyungan family of Australia, is one of the extremely few languages, if not the only one, where all noun phrases follow the tripartite pattern in their case marking, with bound forms of 3rd person singular pronouns apparently serving as case markers.

Now, while perhaps never arising as the result of intransitive-centred developments away from ergative alignment, tripartite patterns may themselves be transformed into accusative ones by means of intransitive realignments, just like ergative patterns. Thus, Proto-Australian 1st and 2nd person personal pronouns have been reconstructed as having had three distinct case forms in the singular for $ACT_i/INACT_i$ (non-suffixed, hence monosyllabic), ACT_t, and $INACT_t$ functions (with ergative and accusative suffixes respectively), and in some languages (such as Western Desert and Dhalandji) the attested $ACT_i/INACT_i$ forms can then be understood as former pure ACT_t forms, with the extension motivated by the ancestrally accusative alignment of non-singular pronouns (and triggered by an innovated prohibition against monosyllabic words). In the upper dialect of Wakhi, a Pamir language, 1st and 2nd person singular pronouns are, in past tense clauses, in the oblique case in ACT_t function, optionally in the accusative case in $INACT_t$ function, and in the absolute form in $ACT_i/INACT_i$ function; but 1st and 2nd person singular pronouns in this last function, especially in that of ACT_i, are, again only in the past tense, also acquiring oblique case marking, and thus reapproach an accusative pattern like that traditionally obtaining in the present tense.

2.1.2. The alignment of intransitive core arguments may also be altered in a more indirect manner, as a by-product of an exchange of constructions. It is not uncommon for verbs to alternate between various constructions, basic and non-basic ones (such as derived voices) or ones with mutually exclusive domains of occurrence (such as main and subsidiary predications), and for these alternative constructions to differ in verbal valency (e. g. in derived voices valency is commonly reduced by one) as well as in the mapping of semantic relations onto syntactic ones. Nominalizations are one kind of non-basic construction within the reach of both intransitive and transitive verbs (see sections 2.2.3. and 3.2.3. for others often reserved for transitives). Depending on the syntactic and semantic properties of nominalizations (e. g. on their transitivity, voice-neutrality, actional or resultative meaning), the alignment of arguments may differ from that of the corresponding verbal constructions – witness nominalizations in English, where $ACT_i/INACT_i$, ACT_t, and $INACT_t$ are all eligible for genitive case marking and preposing, and thus form a neutral pattern (cf. *his death – his discovery of them – their discovery by him*), whereas an accusative case marking and constituent ordering pattern prevails with finite verbs (*He died – He discovered them*). A realignment will then be brought about automatically when one construction happens to be replaced, for whatever reasons, by another that used to differ from it in alignment.

This is what happened in Mayan languages such as Chol and Jacaltec. In Mayan Set A person-number markers of nouns (including nominalizations) refer to ACT_t and $ACT_i/INACT_i$ 'possessors', patterning nominatively; but when used with verbs they exclusively referred to ACT_t, with Set B markers referring to $INACT_t$ and $ACT_i/INACT_i$, yielding an ergative-absolutive pattern. No-

minalizations then replaced verbal constructions in the present (but not past) tense in Chol and in various kinds of subordinate clauses in Jacaltec. Although both transitive and intransitive verbs were thus replaced, the nominalizations corresponding to transitive verbs continued to take Set A markers to refer to ACT_t; it was only with nominalizations corresponding to intransitives that cross-reference markers were exchanged in this process, with those of Set A replacing those of Set B. In effect, though not in mechanism, this resembles extensions of the ergative/restrictions of the absolutive dealt with in section 2.1.1.

2.2. Transitive Realignment

2.2.1. When the locus of change away from ergative alignment is in basic transitive clauses, two arguments are candidates for realignment, individually or jointly, and the results are potentially fairly diverse. If $INACT_t$ ends its association with intransitive core arguments and joins its transitive partner, ACT_t, an ergative pattern is transformed into a double-oblique one; the ergative is here extended syntagmatically rather than paradigmatically. If $INACT_t$ parts company with intransitive core arguments without simultaneously teaming up with ACT_t, the pattern becomes tripartite. If ACT_t, the only loner in the ergative pattern, joins the other core arguments in transitive and intransitive clauses, already in company with each other, the pattern ensuing from this all-encompassing extension of the absolutive is neutral. If both transitive arguments change simultaneously, with ACT_t coming to behave as $INACT_t$ used to behave (and ACT_i/$INACT_i$ still does) and with $INACT_t$ going its own way (perhaps that which ACT_t used to go), the alignment pattern ends up accusative. There is obviously no way an ergative pattern can turn active in exclusively transitive realignments of any kind. All possible developments are attested, especially again for rules of case marking and verb agreement (or cross-reference). Individually and perhaps also collectively, they are less frequent than intransitive realignments, though. It is often a pattern in other domains within the same language which provides a model for such realignments.

While nouns in ACT_t function are in the ergative (identical with locative or instrumental) in other Chukotko-Kamchatkan languages, they have lost this case marker in basic transitive constructions in Kamchadal, and appear in the absolutive instead, sharing this case with $INACT_t$ and ACT_i/$INACT_i$ nouns, which thus pattern neutrally. The uniquely ergative forms of personal pronouns, on the other hand, are retained, but are used for emphasis, regardless of the relation of the argument to be emphasized, in what is thus effectively also a neutral pattern. In Lardil, of the Tangkic subgroup of Pama-Nyungan, ergative case markers have been claimed to have been eroded in the course of phonetic truncations, with ACT_t thus becoming as unmarked as $INACT_t$ and ACT_i/$INACT_i$, likewise resulting in a neutral pattern. In certain varieties of Burushaski there seems to have been a tendency to drop the ergative case from nouns or 3rd person pronouns (1st and 2nd person pronouns do not have this case) in the present, future, and imperfective, with this optional neutral pattern thus complementing the ergative one in the other tenses or aspects. In the Pamir subgroup of Iranian, already mentioned above, the ergative patterns of case marking and verb agreement in past tenses are generally de-ergativized, under the influence of accusative patterns in the present tense, with somewhat different intermediate and final results in different languages and dialects. Concerning case marking, the absolutive on $INACT_t$ was commonly exchanged for an oblique case, also used for ACT_t, resulting (in languages such as Rushan) in a double-oblique pattern. The oblique form of $INACT_t$ was subsequently often differentiated (e. g. in Yazgulyam, Munji, Bartang, Rushan, Upper Wakhi) from the general oblique case, especially if such arguments were definite or had specific reference, by means of additional, specifically accusative prepositions, postpositions, or suffixes, rendering the alignment pattern tripartite. ACT_t, on the other hand, commonly (e. g. in Oroshor, Shugn, Ishkashim, Lower Wakhi) switched from oblique to absolutive, the case also of all $INACT_i$'s and all or most ACT_i's, transforming double-oblique or tripartite patterns into accusative ones, or ergative into neutral ones. The neighbouring Dardic languages too appear to have run this whole gamut of transitive-centred realignments. Modern Indo-Aryan languages have likewise tended to eliminate an ergative case marking pattern, once general in the participial tenses, by means of replacing the nominative of $INACT_t$ (pattern-wise an absolutive but called nominative on

the strength of its patterning in non-participial tenses) by an oblique case (accusative or dative, especially if definite or also animate) and/or the ergative of ACT_t by the nominative case (sometimes only for 1st and 2nd person pronouns), leading to tripartite, neutral, or accusative patterns.

The ergative pattern of gender-number agreement of past participles used in periphrastic verb forms with *essere/être* and *avere/avoir* in Romance languages such as Italian and French, in the literary languages already limited in transitive clauses to $INACT_t$ preceding the past participle, is transformed into a double-oblique one colloquially and dialectally, where there is a tendency for past participles not to agree with $INACT_t$ at all, with $ACT_i/INACT_i$ thus being left as the sole agreement trigger. Exactly the same pattern of (continuing) gender or gender-number agreement with $ACT_i/INACT_i$ but non-agreement (i. e. no-longer-agreement) with either transitive argument is found in the Iranian dialect Danesfani and in the Shugn-Rushan subgroup of the Pamir languages. In Persian the intransitive past-tense agreement markers were tranferred to transitive past-tense verbs, here agreeing in accusative fashion with ACT_t. Elsewhere in Iranian the ergative agreement pattern of verb forms based on past-tense stems (deriving from perfect participles) has been reorganized in different manners, often by way of introducing clitic pronouns functioning as, or cross-referencing, ACT_t and $ACT_i/INACT_i$ but not $INACT_t$ arguments. In the interrogative and imperative moods verb agreement in transitive clauses in Asiatic Eskimo does not follow the ergative pattern as consistently as in the indicative mood, on the basis of which they had originally been formed, which suggests that accusative alignment has been gaining ground since.

Realignments in basic transitive constructions, here described in terms of essentially semantic relations and verbal valency, can often be made sense of by taking into account syntactic relations as well. On the assumption that $INACT_t$ once was the syntactic subject in basic transitive constructions (see section 3.2.3. on how this state of affairs may arise), but is in the process of being stripped of this rank, developments from ergative to accusative or neutral alignment can be seen as transfers of particular subject properties – such as those of taking an unmarked case and triggering verbal agreement, as do (all or some) intransitive core arguments, themselves subjects almost by default – from $INACT_t$ to ACT_t.

2.2.2. Clear cases of transitive-centred realignments following from the wholesale replacement of a construction by one with a divergent alignment pattern are rare. Perhaps some of the examples of the preceding section, where transitive core arguments were apparently realigned on the model of coexisting constructions in other tenses or aspects etc., should be analysed in this manner.

In the case of the optionally omitted ergative in Burushaski, where only 1st and 2nd person pronouns could be invoked as models, matters may have been more complex, too: the present tense, where this happened, was a periphrastic formation homonymous with, or actually deriving from, an intransitive nominalization where an ergative case was unwarranted; this intransitive-inspired construction where ACT could shed the ergative may then have been taken over by transitive verbs in the future tense, which was not periphrastic but used the same verb stem as the present. Less equivocal are a reconstructed development in Lardil and perhaps further members of the Tangkic subgroup of Pama-Nyungan (excepting Yukulta), and one documented for the early modern phase of many Indo-Aryan languages. Upon the phonetic effacement of tense markers in main clauses in Lardil, these were here mostly replaced by 'infinitival' subordinate clause constructions, where tense distinctions had survived, partly in the form of markers appended both to verbs and their $INACT_t$ arguments; since these peculiar tense-cum-case markers were barred from $ACT_i/INACT_i$ and ACT_t, all case-marked identically (in subordinate clauses originally dative or genitive, in main clauses then nominative), an ergative pattern of nominal case marking had turned accusative in the domain of this exchange of constructions. In early modern Indo-Aryan transitive verbs used to agree with $INACT_t$ in the participial (past or perfective) tenses, and the argument thus agreed with was in the nominative case (patternwise an absolutive); but this construction was frequently replaced, sometimes only when $INACT_t$ was definite or animate, by an impersonal one which originally had only been used with intransitive verbs: here verbs were invariably neuter or masculine singular, i. e. did not agree with $INACT_t$ in absolutive

fashion, $INACT_t$ was in an oblique case (patternwise an accusative), and ACT_t as well as $ACT_i/INACT_i$ were in the ergative case (patternwise a nominative).

2.2.3. Changes of alignment may further come about as the consequences of revaluations of non-basic constructions as basic and vice versa, with these alternative constructions possibly differing in transitivity and in the mapping of semantic relations onto syntactic ones. In a basic transitive construction where $INACT_t$ is subject, to a higher degree at any rate than ACT_t, $INACT_t$ should align with the only candidates for subjecthood in intransitive clauses, $ACT_i/INACT_i$, in an ergative (or, more appropriately, absolutive) fashion for purposes of all kinds of rules operating in terms of this syntactic relation – e. g. rules of noun-phrase ellipsis in clause combination, which often require relational syntactic as well as referential identiy. If there are coexisting non-basic constructions of transitive verbs involving antipassivization or retopicalization, where subjecthood is instead conferred on ACT_t (which is the topicworthier argument especially if verbs are imperfective or progressive and the $INACT_t$ referent is less than fully affected and on the verge of losing its status as a core argument), and it is these that are matched with basic intransitive constructions, rules sensitive to syntactic relations are bound to manifest an accusative alignment. If the verbs in such non-basic constructions are detransitivized in respect of $INACT_t$, ACT, their single remaining argument of impeccable core status, should also for this reason naturally group with the single core argument of basic intransitives, especially with ACT_i. The revaluation of such non-basic constructions as basic and vice versa, or perhaps even the complete supplanting of previously basic by previously non-basic constructions, eventually accompanied by a reintegration of somewhat peripheral $INACT_t$ arguments into the core of verbal valency, then automatically entails switched alignment of transitive arguments.

The accusative pattern of case marking in the present-tense system of Georgian, with the dative as the $INACT_t$ case, has been assumed to originate in an antipassive construction; this was supposedly once a non-basic option highlighting imperfectivity and incomplete affectedness of $INACT_t$, but was reanalysed as basic in non-perfective aspects, whereas the originally basic construction, with case marking on an ergative or active pattern, subsists in the aorist. It is controversial whether the alignment of case marking and perhaps further syntactic rules in Proto-Polynesian is to be reconstructed as ergative or accusative; according to the Ancestral Ergative Hypothesis many East Polynesian languages replaced the basic transitive construction, where ACT_t had been marked by an (ergative) preposition and $INACT_t$ unmarked (like $ACT_i/INACT_i$), by an originally non-basic imperfective construction with ACT_t unmarked (like $ACT_i/INACT_i$) and $INACT_t$ marked prepositionally, itself purportedly an early innovation for transitive verbs modelled on the pattern of semi-transitive middle verbs (denoting relations where one participant does not really affect the other). Perfective transitive clauses, whose verbs allegedly generalized the suffix *-Cia*, for a while continued the ergative pattern, with ACT_t marked by the original preposition and $INACT_t$ unmarked, but are claimed to have been revaluated as non-basic passives, with unmarked INACT as subject, completing the triumph of accusative alignment for basic constructions. In the history of the more consistently accusative Pama-Nyungan languages, hailing from the Ngayarda and Tangkic groups, intransitive antipassive constructions, once productively derived from basic transitive constructions and in certain circumstances probably even obligatory (e. g. in negative and some subordinate clauses or with certain person-number combinations of ACT_t and $INACT_t$ pronouns), seem to have been reanalysed as basic, too. In Lardil only those original main clause constructions which had not been replaced by subordinate constructions (see above, 2.2.2.) were available for this reanalysis. The frequent presence in Pama-Nyungan of a structurally similar, basic or derived 'middle' construction, where ACT is subject for all syntactic and inflectional purposes and INACT is syntactically rather peripheral and generally in the dative, is likely to have been conducive to the revaluation of antipassives as basic and the complete or partial displacement of the former basic construction. Wargamay is (or rather was) a Pama-Nyungan language retaining an ergative pattern of nominal case marking (pronominal case marking being tripartite) and of argument ellipsis in clause combination. Nevertheless, owing to a reanalysis of intransitive verbs derived from transitives, as occurring in antipassive constructions, as morphologi-

cally basic, most transitive verbs could equally well be used in intransitive constructions, with ACT behaving in all respects like, and INACT unlike, $ACT_i/INACT_i$; and if it had not been for the retention of the original transitive construction of these verbs, alignments would thus have turned completely rather than only partly accusative.

In a variation on this theme, in Kamchadal, mentioned earlier for its extension of the absolutive case to ACT_t, the ergative case, formally identical with the locative, actually survived, but the basic transitive clauses where it occurred on ACT_t appear to have been reanalysed as non-basic passives, influenced perhaps by an impersonal construction in Russian; basic transitive constructions are those where ACT_t, like $ACT_i/INACT_i$ and $INACT_t$, is in the absolutive. In the Vakh dialect of Khanty, an Uralic language, two basic constructions coexist, one of which shows an ergative case marking pattern insofar as ACT_t is in the locative and $INACT_t$ in the nominative (which is not differentiated from accusative for nouns – pronouns, however, are in the accusative); this construction seems to have been absorbed by the non-basic passive in the other dialects of Khanty, which is structurally not very different (even pronominal INACT is here in the nominative, and INACT rather than ACT is agreed with by the verb). It has also been conjectured that the passive of Khanty and related Mansi actually is this very construction with ergative features reanalysed as non-basic.

In Kurdish the basic transitive construction of Middle Iranian provenance, where $INACT_t$ (like $ACT_i/INACT_i$) is in the direct case and triggers agreement and ACT_t is in the oblique case, appears to have been crowded out by means of a non-basic construction where ACT_t is topicalized, characterized by resumptive pronominal clitics cross-referencing the topic (retained in Southern but lost in Northern Kurdish).

2.3. Joint Intransitive and Transitive Innovations

When changes affect intransitive and transitive clauses simultaneously, an ergative alignment may be superseded by a non-ergative one differing from its predecessor both in the intransitive and the transitive components of the pattern. This typically happens, though on the whole not very frequently, when rules of relational encoding are innovated or extended from one domain into another, rather than being merely reorganized.

Thus, in Tabasaran, an East Caucasian language with verbs traditionally agreeing in class with $ACT_i/INACT_i$ and $INACT_t$, i. e. with absolutives, person agreement was in addition introduced in intransitive and transitive clauses, and the arguments agreed with here were $ACT_i/INACT_i$ (as in class agreement) and ACT_t, i. e. nominatives. In a comparable example the point of departure, however, was not strictly an ergative pattern: in Maithili, a modern Indo-Aryan language where the impersonal construction mentioned in section 2.2.2. had become predominant, personal suffixes recently created from optional pronominal enclitics were extended from non-participial (present or imperfective) tenses to intransitive and transitive impersonal verbs in this construction, introducing nominative agreement (with $ACT_i/INACT_i$ and ACT_t) where there had been no agreement with any core argument (a kind of neutral pattern). If Kapingamarangi once shared the typical case marking pattern of Samoic-Outlier languages – $ACT_i/INACT_i$ and $INACT_t$ unmarked (the latter marked by the prepositions *il/ki* in semi-transitive middle constructions), ACT_t with preposition *e* –, it must have innovated markers both for $INACT_t$ in canonical transitive constructions (viz. *i*, taken from middles or perhaps also retained from a former active construction, cf. 3.2.3.) and for $ACT_i/INACT_i$ (among others *e*, originally confined to ACT_t), arriving at an accusative pattern.

3. Towards Ergative Alignment

3.1. Intransitive Realignment

3.1.1. It is far less common for an ergative pattern to be the result of the realignment of intransitive core arguments in a basic construction than to be its victim, even though there are three possible sources: accusative patterns, turning ergative, perhaps via an active stage, by extensions of the accusative relation to (some) intransitive clauses and, equivalently, limitations of the nominative relation to transitives; active patterns, turning ergative by extensions of the inactive relation to ACT_i and, equivalently, limitations of the active relation to ACT_t; and tripartite patterns, turning ergative by aligning $ACT_i/INACT_i$, so far unaligned, with $INACT_t$. The very few instances actually on record of such

changes towards ergative, or ergativish, realignment involve rules of case marking and linear ordering and the distribution of case alternations.

In a few Pama-Nyungan languages an accusative case marker, typically used on personal pronouns and perhaps certain nouns from the top of the animacy scale in $INACT_t$ function in this family (other nominals being in the absolutive case in this function), was extended to apparently all kinds of nominals (Dhalandji) or only to proper names (Warluwarra, Western Desert) in $ACT_i/INACT_i$ function. Insofar as proper names are likelier than nouns lower on the animacy scale to occur as ACT_i, the alignment thus innovated in Warluwarra and Western Desert could almost be characterized as counter-active, with $INACT_t$ tending to be paired with ACT_i and ACT_t with $INACT_i$ for a subset of nominals. In Medieval Latin, especially as written prior to the mid-8th century, and perhaps in other varieties of Late Latin, the accusative case, generally competing for survival with the nominative in the transition from Latin to the Romance vernaculars, was frequently extended in a conspicuously non-random manner: the nominatives replaced by accusatives were mostly markers of INACT in passive, i. e. derived intransitive constructions, and sometimes of $INACT_i$ in basic intransitive constructions, but virtually never of $INACT_t$ nor of ACT_t. This is in fact an active pattern, and there was no way the extension of the accusative to all intransitive core arguments could be completed, since the paradigmatic contrast between accusative and nominative was about to collapse. According to the controversial Ancestral Active Hypothesis, Kartvelian languages (except Mingrelian) witnessed a development Late Latin might have been expected to undergo if this case contrast had survived, viz. the withdrawal of an active case, marking ACT_t and ACT_i, from intransitive clauses, transforming it patternwise into an ergative. Kungkari is one of the very few Pama-Nyungan languages where the old tripartite case system for personal pronouns was reduced to two cases by means of extending the $INACT_t$ rather than the ACT_t form to $ACT_i/INACT_i$, resulting in an ergative rather than an accusative pattern, unusual for pronouns but standard for nouns.

Although significant ergative alignments are not usually recognized in modern Uralic languages other than Khanty, the Finnic group (comprising Finnish, Karelian, Veps, Vote, Estonian, and Livonian) shows a development that is interpretable as an extension of an 'accusative'. The distributional pattern of the partitive case in early Proto-Finnic is reconstructible as accusative, alternating in basic constructions with the accusative and nominative cases on $INACT_t$, but never on ACT_t or $ACT_i/INACT_i$. From $INACT_t$, the first foothold in the process of its grammaticization from a local case of separation, the partitive then extended its distribution into intransitive clauses, especially those affirming the existence, the coming into existence, the cessation of existence, or an essential change in the state of their core argument – probably more often an $INACT_i$ than an ACT_i. (Since verbs do not agree in person and number with core arguments marked partitively in the modern languages, this extension of an accusative presumably pertained to agreement as well.) It is questionable, however, whether the inactive or absolutive distribution of a mature partitive is typologically significant: such patterns are recurrent in languages with comparable devices for distinguishing between partial and total involvement, between quantified and unquantified, or indefinitely and definitely quantified, reference, and the like.

In 17th century Spanish a statistical preference has been observed for intransitive core arguments, like non-clitic $INACT_t$'s, to follow their verbs and for ACT_t's to precede them. The earlier pattern of preferred constituent ordering – ACT_t + $INACT_t$ + Vb, $ACT_i/INACT_i$ + Vb – was not unequivocally accusative: $ACT_i/INACT_i$ could be paired with ACT_t on grounds of clause-initial position, but with $INACT_t$ on grounds of preverbal position. Assuming that the former pairing is more appropriate, the frequent postverbal positioning of $ACT_i/INACT_i$, once $INACT_t$ had become postverbal, amounted to an acquisition of an accusative property by $ACT_i/INACT_i$. The resulting statistically predominant ordering pattern was perhaps again activish rather than strictly ergative: it was primarily non-topical intransitive arguments which were postverbal, and these are very common with verbs of existence, i. e. verbs taking an $INACT_i$ rather than an ACT_i. As to the typological significance of this pattern, it should be noted that if linear ordering is sensitive to topic-comment structures, arguments of intransitive verbs of existence and perhaps other intransitive verbs of low semantic specificity are al-

most bound to be aligned with $INACT_t$, typically forming part of the comment in basic transitive constructions in most languages.

It has been suggested that intransitive core arguments, subjects virtually by default, will tend to realign with transitive arguments holding the same syntactic relation, and that ACT_t rather than $INACT_t$ is the subject of basic transitive constructions in the great majority of languages. On these assumptions it is not surprising that ergatives are frequently, but accusatives only rarely, extended to intransitive clauses. Where accusatives are so extended, however, an analogous reasoning is hardly cogent: the relevant languages are not among those where $INACT_t$ is the subject of basic transitives. Stronger motivation for realignments of $ACT_i/INACT_i$, or more typically only a subset of intransitive arguments, with $INACT_t$ seems generally to be provided by relational semantic similarities and common pragmatic potentials.

3.1.2. Intransitive-centred changes introducing ergative alignment as the by-product of an exchange of constructions, analogous to those with the reverse effect dealt with in section 2.1.2., do not seem to be frequent. A pertinent example is perhaps the abandonment of the ancient intransitive impersonal construction in some dialects of Hindi while the innovated transitive impersonal construction (cf. 2.2.2.) was retained. There had been an accusative pattern here insofar as $ACT_i/INACT_i$ and ACT_t were both in the ergative case (and definite $INACT_t$ was in an oblique case). In the personal construction which took over from the impersonal intransitive one $ACT_i/INACT_i$ was in the nominative case, which reinforced the ergative patterning of case marking in the past tense (although an accusative ingredient remained, viz. the oblique case on $INACT_t$ in impersonal transitives).

3.2. Transitive Realignment

3.2.1. When the locus of change is in basic transitive constructions, an ergative pattern could evolve from four sources: from a neutral pattern, by way of ACT_t separating from $INACT_t$ and $ACT_i/INACT_i$; from an accusative pattern, by way of ACT_t separating from, and $INACT_t$ associating with, $ACT_i/INACT_i$; from a tripartite pattern, by way of $INACT_t$ teaming up with $ACT_i/INACT_i$; and from a double-oblique pattern, by way of $INACT_t$ separating from ACT_t and joining $ACT_i/INACT_i$. Only the first and, more rarely, the second of these transitions seem attested, both involving realignments of ACT_t. The rules concerned are primarily ones of case marking, rarely of verb agreement.

In Papuan languages, noun phrases in core relations, unlike those in peripheral relations, are assumed originally not to have been case-marked; peripheral case markers such as ablative, causal, or instrumental were then optionally used also for ACT_t, especially in situations where a transitive clause might otherwise be relationally ambiguous owing to insufficiently distinctive verbal agreement. (In other Papuan languages an oblique case, especially the dative, was instead used for $INACT_t$, especially if animate, converting a neutral into an accusative rather than an ergative pattern; in Waris, such an extended dative, patternwise an accusative, was further extended from $INACT_t$, of verbs expressing a change of state, to $INACT_i$, creating an active pattern.) In Lardil, where subordinate-clause constructions with accusative-style case marking have been installed in main clauses, non-infinitival subordinate clauses themselves seized on the genitive case as a new marker specifically for ACT_t, perhaps first for personal pronouns (whose oblique case forms, some of which had already been employed in similar functions, are based on the genitive), which precluded relational ambiguities which might have arisen with transitive verbs one of whose arguments was omitted under identity with an argument in the main clause; when $INACT_t$ in such subordinate clauses is in the accusative, the resulting pattern is, however, tripartite rather than ergative. Among Indo-Iranian languages Shina (belonging to the Dardic group) is almost unique in having fully generalized the ergative case-marking pattern from past tenses or perfective aspects to all tenses or aspects: in the non-past, where $ACT_i/INACT_i$ and ACT_t used to be in the direct case, ACT_t acquired a new ergative suffix, borrowed from the neighbouring Tibetan language Balti; $INACT_t$ continued to be in the oblique case with a minority of transitive verbs, giving rise to a tripartite pattern, but mostly changed over to the direct case, patternwise now an absolutive. Tibetan influence has also been claimed for a similar generalization in colloquial Nepali, where it was the indigenous instrumental, rather than a borrowed ergative case form, that gained currency as a marker of ACT_t also in non-past tenses, with IN-

ACT_t being alternatively oblique (especially if animate) or direct.

In Chinook, a Penutian language, pronominal clitics on verbs have originally had single forms common to all core arguments; as a result of phonological changes applying only in certain environments, special ACT_t forms then happened to be differentiated for masculine and feminine 3rd person singular pronouns, and a special ACT_t formative was added to others except those of 1st and 2nd person singular, which continued the neutral pattern. In a development that is more difficult to evaluate typologically, Gujarati and some dialects of Rajasthani and Pahari added number and gender markers to impersonal transitive verbs thus agreeing with $INACT_t$. On the face of it this looks like an accusativization of a neutral alignment, since ACT_i/$INACT_i$ and ACT_t continued not to be agreed with in the impersonal construction. On the other hand, insofar as verb agreement is with absolutives, i. e. ACT_i/$INACT_i$ and $INACT_t$, in personal constructions of participial (past) tenses in these Indo-Aryan languages, the innovated agreement of former impersonal verbs with $INACT_t$ can also be seen as a partial reinforcement of absolutive agreement, with intransitive impersonals becoming the odd one out.

Comparing realignments in transitive clauses which effect ergative patterns with those that affect them (2.2.1.), it seems that models from other domains in the same language play a less important role here (they are a factor only in the relevant Indo-Aryan languages), and that not much motivation is to be found in syntactic relations either, as there are no indications in the relevant languages that $INACT_t$ rather than ACT_t has to be paired with ACT_i/$INACT_i$ as subject.

3.2.2. Although not a logical impossibility, ergative alignment does not seem to come about as a consequence of the wholesale replacement of transitive constructions patterning non-ergatively.

3.2.3. It does come about rather frequently, however, as a result of the revaluation of non-basic constructions as basic, complementing or ousting, at least from some domains, the original basic transitive constructions – a mirror image of the transformation of ergative into accusative alignment dealt with in section 2.2.3. In a basic transitive construction where ACT_t is subject, to a higher degree at any rate than $INACT_t$, ACT_t should align with the only candidates for subjecthood in basic intransitive clauses, ACT_i/$INACT_i$, for purposes of rules operating in terms of this syntactic relation. Now passives or other derived voices, nominalizations or other deverbalizations, and retopicalizations are possible non-basic constructions of transitive verbs where subjecthood is likely to be conferred on $INACT_t$ instead – a particularly strong rival of ACT_t for topicworthiness if predicates are perfective, resultative, or stative, the $INACT_t$ referent is thoroughly affected by or is itself partly responsible for what has happened, and/or the ACT_t referent is relegated to the communicative background or ranks lower than $INACT_t$ on the referential hierarchy or in definiteness. If intransitives are matched with such non-basic constructions, rules sensitive to syntactic relations are bound to follow an ergative pattern – unless intransitives also appear in a non-basic construction where ACT_i/$INACT_i$ is not subject. If the verbs or deverbal predicates in non-basic constructions of transitives are detransitivized in respect of ACT_t, INACT is their single argument of indubitable core status, and this should be another reason for it to group with the core arguments of basic intransitives, in particular with $INACT_i$. The revaluation of such non-basic constructions as basic, with the obsolescence of previously basic constructions as a likely concomitant, and the eventual reintegration of somewhat peripheral ACT arguments into the syntactic core of bivalent verbs, then automatically entails switched alignment of transitive arguments.

The ergative case marking and agreement patterns in Indo-Iranian are thus to be attributed to a perfective participial construction of transitive verbs used as a periphrastic passive or possessive construction in Old Indo-Aryan and Old Iranian ('something is done by me' or 'my doing', cf. for the latter Latin *mihi factum est*), where the participle agreed in gender, number, and case with nominative INACT, functioning as subject for other purposes as well, and ACT, syntactically a more peripheral argument, was in the genitive(-dative) or instrumental case. This non-basic construction then took the place of the active perfect or past of transitives (initially unpassivizable), with the participle reintegrated into the finite verb paradigm and ACT reintegrated into the syntactic core (though not at first as subject), accounting

for the ergative alignment in these aspectual or temporal domains. Old Armenian and, incipiently, Modern Irish may be further Indo-European examples of such reanalyses of respectively passive and possessive constructions with stative deverbal adjectives as basic. If Proto-Polynesian is to be reconstructed as accusative in case (or rather adpositional) marking and elsewhere in syntax (see section 2.2.3. for the contrary view), the most plausible origin of ergative alignments in Tongic and many Samoic-Outlier languages, by now essentially only a matter of case marking, is the reanalysis of a frequently used passive construction of transitives – itself intransitive, with suffix *-Cia* as a verbal passive marker, and with INACT unmarked and non-core ACT accompanied by an agentive preposition – as basic and again transitive. In this view the original passive suffix *-Cia* took on new functions (e. g. those of an inflectional transitivity marker or of derivational aspect markers), and the original active construction was lost or subsisted, perhaps merged with the semi-transitive middle construction. Assuming that not only Eastern Austronesian (especially Polynesian) languages, but also Western Austronesian ones, especially from the West Indonesian and Philippine groups, evince patterns that qualify as ergative, these seem best accounted for by deriving them historically from passives, or passive-like constructions where the focus is on INACT rather than ACT, that have come to be the norm for transitives. Passive sources of basic ergative alignments have likewise been claimed for Basque, Ancient Egyptian and some modern Aramaic dialects, and, more speculatively, Enga and other Papuan languages, Mayan, Salish languages such as Squamish, and Lardil (here for subordinate clauses only). The 'middle' and the passive have become obligatory in Rural and Urban Ozark English respectively whenever there is no true volitional and responsible agent (as in *Sue's new dress tore because of Billy / was torn by Billy – but he didn't mean to*); when there is one, transitive verbs must be used in the active construction. Since their obligatoriness, conditional on the nature of the ACT relation, distinguishes the Ozark middle and passive from typical derived voices, with the middle moreover being on morphological grounds almost as basic as the active, the ergative alignments of relational coding and syntax ensuing from them are no longer as clearly secondary vis-à-vis the accusative alignments ensuing from the active transitive construction as they are in Standard English.

In Aleut, a nominalization of transitive verbs where INACT, i. e. the 'possessed' rather than the 'possessor', is assigned the same status as an $ACT_i/INACT_i$, has been held responsible for incipient basic ergative alignment. The Carib language Makúsi provides another example where the newly installed basic construction is not a formerly non-basic voice: here the reconstructed preferred order ACT_t + $INACT_t$ + Vb has been changed to $INACT_t$ + Vb + ACT_t, apparently by grammaticization of the right-dislocation of afterthought constituents; since $ACT_i/INACT_i$ continued to occur preferably in preverbal or rather clause-initial position, the ordering pattern ended up as unequivocally ergative.

3.3. Joint Intransitive and Transitive Innovations

Ergative alignment may appear in the course of changes affecting both intransitive and transitive clauses, but this seems to happen as infrequently as the reverse development.

In Päri, a Western Nilotic language, the basic constituent order used to be Vb + $ACT_i/INACT_i$ and Vb + ACT_i + $INACT_t$, and $ACT_i/INACT_i$ and ACT_t were case-marked identically while $INACT_t$ was unmarked. The ordering pattern was thus ambiguously accusative or ergative, depending on the pairing of $ACT_i/INACT_i$ with ACT_t as postverbal or with $INACT_t$ as clause-final; case marking conformed to the accusative pattern, if in a comparatively unusual manner, with the nominative as the marked and the accusative as the unmarked case. When the basic constituent order changed in both intransitive and transitive independent indicative clauses to $ACT_i/INACT_i$ + Vb and $INACT_t$ + Vb + ACT_t, apparently grammaticizing the topicalization of $ACT_i/INACT_i$ and $INACT_t$, $ACT_i/INACT_i$ was unequivocally associated with $INACT_t$ in basic constructions (imperatives and subordinate clauses continued the old order). Since $ACT_i/INACT_i$ further dropped the nominative, case marking ended up as ergative too, by way of an extension of the (unmarked) accusative to, or withdrawal of the (marked) nominative from, intransitives. In certain non-Pama-Nyungan languages of Australia all arguments used to be accompanied by noun-class markers (patternwise a neutral distribu-

tion) but only some are now. In Burarra noun phrases in ACT_i/$INACT_i$ and $INACT_t$ function have lost these class markers but those in ACT_t function have retained them (elsewhere they were kept only on definite noun phrases, but these tend to be ACT_t's as well); these former pure class markers are thus exploited also for relational coding, distinguishing ergatives from not class-marked absolutives.

4. Reasons for Realignments

4.1. As ergative and other alignments commonly manifest themselves in the morphological encoding of grammatical relations, they may be altered fortuitously by phonological changes which affect inflectional exponents and create or obliterate paradigmatic contrasts, with the same forms perhaps faring differently in different contexts. Realignments due to such extraneous interferences are rare, though; normally they are a matter of genuinely morphosyntactic or also lexical change, and thus call for explanations of their own. A brief sketch of some general explanatory considerations, in particular of constraints on and incentives to realignments, must suffice here.

4.2. The assumption that formal economy is at a premium in language change accounts for replacements of tripartite alignment, especially in case marking and verb agreement, by ergative, accusative, active, or double-oblique patterns, because these reduce a ternary contrast to binary ones. Neutral alignment is of course the ultimate in economy, and should thus be the preferred target on this count. On the assumption that the foremost task of relational coding devices merely is to distinguish the relations of arguments which co-occur in one clause, ergative or accusative patterns should gain the upper hand on neutral and double-oblique ones, which fail in this task, on tripartite ones, which are unnecessarily uneconomical, and also on active ones, which are overdoing it too, there being no need of syntagmatic distinction in intransitive clauses. It follows that transitive clauses ought to be the locus of change if realignments are to do with the introduction of a relational distinction. On the assumption that relational encoding also ought to ensure the clear identifiability of the relation of each argument, realignments should be aiming at the active pattern, which best takes care of relational semantics, or perhaps the tripartite one, which best reflects verbal valency.

It is the ergative, accusative, and active patterns which get the best overall grades on these three criteria. On each of them the ergative pattern finishes level with the accusative one, so that there should be no particular reason for them to interchange diachronically; but this is what they are wont to do. Otherwise there should be possibilities for ergative patterns to develop from tripartite and into neutral ones if the first criterion proves decisive, from neutral and into tripartite and active ones if things go as the third criterion would have it, and from all other patterns except the accusative one if improvement is according to the second criterion. Of all these possibilities only that of an ergative pattern evolving from a double-oblique one seems unrealized; the transition from ergative to double-oblique, on the other hand, is attested, if rarely, but cannot be considered an improvement on any count.

4.3. As to rules and regularities of variable alignment, the patterning encountered most commonly at least in present-day languages is the accusative one, followed at some distance by the ergative one, with the active one coming third. Going by these unequal cross-linguistic frequencies, one might conclude that the currently less favoured alignments, representing the somehow costlier options, will generally be at a disadvantage, with their rivals always poised to advance at their expense. Some such view has been held most prominently by adherents of a 'stadial' theory of language development, for whom changes of alignment were essentially unidirectional and tied up with sociocultural progress. The idea of ergative alignment being inherently inferior to, hence less fit to survive than, its accusative competitor tends to seek support from the supposed failure of this pattern to give due recognition to the syntactic relation of subject, pairing ACT_i/$INACT_i$ in basic constructions with $INACT_t$ rather than with ACT_t. Much of the evidence surveyed in sections 2 and 3 is plainly inconsistent with any hypothesis that realignments are necessarily a one-way affair.

4.4. A major, and more tangible, force that keeps alignments changing is the tension between diverse patterns coexisting in particu-

lar languages, providing each other with models and actual forms for analogical reorganization. No language is completely homogeneous in its alignments, and if this heterogeneity is due to rules and regularities which admit of variation, rather than only to such as are invariably of one or another type, the stage is set for some to-ing and fro-ing. Once alignments have come to be diverse, for whatever reason, a motive for realignments then is to reduce their diversity and thus to simplify grammars. To some extent this may be done randomly, but there are apparently also general principles determining winners and losers in such analogical levellings. Thus, if different alignments obtain for the syntactic behaviour of arguments and the morphological encoding of their relations, the latter will be adjusted to the former but not vice versa; or if constructions differing in alignment also differ in their expressive potential, perhaps owing to the loss of a morphological contrast in one of them, the more expressive one will succeed.

The ways alignments are split within languages are largely non-random in the first place, reflecting different affinities, motivated by the semantics or pragmatics of types of arguments and constructions, to different patterns. Thus, whenever such alignments coexist, an ergative one is likely to appear for instance in past tenses or perfective aspects, with nominals not predestined to be agents and especially with non-pronouns, in relational coding in general and especially in case marking and agreement in terms of class, and in certain kinds of subordinate clauses, while present tenses and imperfective aspects, nominals predestined to be agents and especially 1st and 2nd person pronouns, syntactic rules of noun-phrase ellipsis in clause combination, relational coding by means of verbal agreement or cross-reference, agreement in terms of person, and main clauses are liable to pattern accusatively. Changes of alignment, occurring individually or in combination, should not lead to splits contravening such universal preferences. On the evidence of sections 2 and 3 only the main/subordinate parameter is not fully effective, insofar as accusative patterns are found to replace ergative ones selectively in main but also in subordinate clauses.

Changes of alignment due to the borrowing of inflectional forms or entire constructions ought to be subject to similar constraints as those regulating language-internal trading.

4.5. Non-basic constructions are unlikely to be revalued as basic – a common source of changes of alignment – unless they are used relatively frequently. In Standard English, as in other languages with predominantly accusative morphosyntax, there may be particular genres (e. g. scientific prose), verbs (e. g. *bury*), and tenses or aspects (past, perfect) where the passive is actually favoured over the active, but it is improbable that this will ever suffice for the passive to be reranked over the active even for these particular domains. One reason for massive increases in the frequency of non-basic constructions is the curtailment of the expressive potential of basic ones, perhaps caused accidentally by the phonological obliteration of morphological contrasts. Another, relevant in particular to voice alternations, are changes in the cultural milieu, in the practices, norms, and beliefs of the language community that are reflected in lexical and morphosyntactic structures relating to the notions of topic and subject. The (nominative) alignment of ACT_t with $ACT_i/INACT_i$ on the grounds of their being subjects, i. e. preferred topics, in basic constructions would seem to betray a certain cultural bias towards active arguments of transitive verbs as being inherently topicworthier than those acted upon; and vice versa for the (absolutive) alignment of $INACT_t$ with $ACT_i/INACT_i$. The conceptions of basic predicates as either perfective/resultative/stative or imperfective/progressive/dynamic, naturally focussing the main attention on ACT_t or on $INACT_t$ respectively, may be a corresponding factor. Reversals of such cultural attitudes responsible for ACT_t having the edge on $INACT_t$ or vice versa in respect of inherent topicworthiness are likely also to reverse the frequencies of their being chosen as actual topics and subjects, and concomitantly of basic and non-basic voices – a precondition for their revaluation and for appropriate modifications of the lexical semantics of predicates.

5. References

Anderson, Stephen R. 1977. On mechanisms by which languages become ergative. Mechanisms of syntactic change, ed. by Charles N. Li, 317–363. Austin.

Comrie, Bernard. 1978. Ergativity. Syntactic typology: Studies in the phenomenology of language, ed. by Winfred P. Lehmann, 329–394. Austin.

Dik, Simon C. 1980. On the subject of ergative languages. Studies in Functional Grammar, by Simon C. Dik, chapter 5. London: Academic Press.

Dixon, R. M. W. 1979. Ergativity. Language 55. 59–138.

Estival, Dominique, and John Myhill. 1988. Formal and functional aspects of the development from passive to ergative systems. Passive and voice, ed. by Masayoshi Shibatani, 441–491.

Harris, Alice C. 1990. Alignment typology and diachronic change. Language typology 1987: Systematic balance in language, ed. by Winfred P. Lehmann, 67–90. Amsterdam.

Kibrik, Aleksandr E. 1979. Canonical ergativity and Daghestan languages. In Plank (ed.) 1979, 61–77.

Klimov, Georgij A. 1983. Principy kontensivnoj tipologii. Moskva.

Kuryłowicz, Jerzy. 1946. Ergativnost' i stadial'nost' v jazyke. Izvestija Akademii Nauk SSSR, Serija literatury i jazyka 5. 387–393.

Plank, Frans. (ed.) 1979. Ergativity: Towards a theory of grammatical relations. London.

–. 1979. Bibliography on ergativity. In Plank (ed.) 1979, 511–554.

–. 1985. The extended accusative/restricted nominative in perspective. Relational typology, ed. by Frans Plank, 269–310. Berlin.

Trask, Robert L. 1979. On the origins of ergativity. In Plank (ed.) 1979, 385–404.

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65. Relativsätze

1. Vorbemerkung

Die Grammatik des Relativsatzes gehört in den meisten Hinsichten zu den am besten erforschten Gebieten der Syntax. Umfassende Behandlungen sind Touratier 1980 und Lehmann 1984 (aus dem letzteren sind die meisten Beispiele ohne weitere Quellenangabe entnommen). Lediglich über die Diachronie des Relativsatzes ist vergleichsweise wenig Allgemeines bekannt. Verhältnismäßig zahlreichen Detailstudien, insbesondere über indogermanische Sprachen (vor allem Kurzová 1981), stehen wenige diachron-typologische Arbeiten gegenüber, aus denen Verallgemeinerungen über Wandel von Relativsätzen abgeleitet werden könnten. Man ist weitgehend in der methodischen Lage, aus wohlerforschten indogermanischen Phänomenen induktiv zu verallgemeinern oder die beobachtbare synchrone Variation in die Diachronie zu projizieren.

Der Relativsatz wird in Abschnitt 2 als interlinguale grammatische Kategorie konzipiert. D. h. es wird ein Prototyp definiert, mit dem Strukturphänomene einzelner Sprachen verglichen werden können. Dabei kann sich für eine gegebene Sprache herausstellen, daß sie eine Konstruktion besitzt, die zweifelsfrei unter die Definition fällt, oder eine Konstruktion, die nur marginal als Relativsatz zu betrachten ist, oder daß sie überhaupt keinen Relativsatz hat. Die im folgenden angesetzten definitorischen Bedingungen sind spezifisch genug, daß in der Tat nicht alle Sprachen einen Relativsatz haben, aber andererseits so schwach, daß doch die meisten Sprachen einen haben.

Projiziert man diese Situation in die Diachronie und berücksichtigt die relativ kurze Dauer, über welche die meisten Sprachen der Welt historisch bezeugt sind, so wird verständlich, daß die meisten Sprachen während ihrer gesamten dokumentierten Geschichte einen Relativsatz haben. Folglich sind die Chancen, einen Relativsatz in statu nascendi oder moriendi zu beobachten, ziemlich gering. Dies ist der Aspekt des Objektbereichs, der für die genannte Forschungssituation verantwortlich ist. Empirisch gut untersucht sind lediglich Wandelprozesse, die den Relativsatz als solchen voraussetzen und unangetastet lassen. Verhältnismäßig wenig ist bekannt über Prozesse, die zu Relativsätzen führen oder sie eliminieren. Mehr hierzu in Abschnitt 3.1.

2. Grammatik des Relativsatzes

2.1. Wesentliche Funktion des Relativsatzes

An (1) läßt sich zunächst der Begriff des Relativsatzes vortheoretisch erläutern.